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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/749,836

12/30/2003

Sang-Hee Kang

51876P559

9426

8791 7590 06/06/2007
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EXAMINER

LE, THONG QUOC

ART UNIT

PAPER NUMBER

2827

MAIL DATE

DELIVERY MODE

06/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/749,836

Applicant(s)

KANG, SANG-HEE

Examiner

Thong Q. Le

Art Unit

2827

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 19 and 20 is/are rejected.
- 7) ☒ Claim(s) 3-18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Amendment filed on 04/11/2007 has been entered.
2. Claims 1-20 are presented for examination.

Response to Arguments

3. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Miyamishi (Pub. U.S. Patent No. 2004/0078701).

Regarding claim 1, Miyanishi discloses a semiconductor device (Figure 1) for comparing an input address with a stored repair address, comprising:

a signal controller (5) for generating control signals and an enable signal (105, 106, [0031]);

an address latch unit (Figure 1, 4,3,2) in response to the control signals for latching the input address;

N number of M-bit address comparators (Figure 1, ADDRESS COMPARATOR), each for comparing the latched input address with the stored repair address (Figure 1, 12) in response to a fuse reset signal and the enable signal (Figure 1, 16, 15);

a comparator delay modeling block (Figure 3, 51) for delaying the enable signal for a predetermined time ([0031-0032]); and

a repair circuit controller (Figure 1, 6, 8) in response to the delayed enable signal output from the comparator delay modeling block for generating one of a repair address enable signal and a normal address enable signal based on a comparison result of the address comparators ([0036-0040]).

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2, 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Bosshart (U.S. Patent No. 6,223,248).

Regarding claims 1, 19, Bosshart discloses a semiconductor device (Figure 1) for comparing an input address with a stored repair address, comprising:

a signal controller (Figure 4,44) for generating control signals and an enable signal (Column 8, lines 53-55);

an address latch unit (Figure 1, 22) in response to the control signals for latching the input address;

N number of M-bit address comparators(Figure 3), each for comparing the latched input address with the stored repair address in response to a fuse reset signal and the enable signal;

a comparator delay modeling block for delaying the enable signal for a predetermined time (Column 6, lines 25-54); and

a repair circuit controller (Figure 9, Column 3, lines 41-48) in response to the delayed enable signal output from the comparator delay modeling block for generating one of a repair address enable signal and a normal address enable signal based on a comparison result of the address comparators (Column 8, lines 7-31).

Regarding claims 2, 20, Bosshart discloses a comparator initialization unit for generating the fuse reset signal to enable and initialize the N number of M-bit address comparators (ABSTRACT, Column 37, lines 12-21, Column 39, lines 12-14).

Allowable Subject Matter

7. Claim 3-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 1-13 include allowable subject matter since the prior art made of record and considered pertinent to the applicant's disclosure does not teach or suggest the claimed limitations. Bosshart (U.S. Patent No. 6,223,248), and Miyanishi (Pub. U.S.

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Patent No. 2004/0078701), and others, does not teach the claimed invention having wherein each of the M-bit address comparators includes: a fuse enabling means for receiving the fuse reset signal and the enable signal to thereby output a fuse enable signal in response to whether an enabling fuse included in the fuse enabling means is blown out or not; a plurality of unit repair address comparing means for respectively comparing each bit of the latched input address with each bit of the stored repair address which is stored in the repair address comparing means; and a signal combination means for outputting a repair signal in response to results of the plurality of unit repair address comparing means, wherein the signal combination means is enabled by the fuse enabling signal.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q. Le whose telephone number is 571-272-1783. The examiner can normally be reached on 8:00am-5:00pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarabian Amir can be reached on 571-272-1852. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thong Q. Le
Primary Examiner
Art Unit 2827

A handwritten signature in black ink, appearing to read 'Thong Q. Le', is written over the printed name and title.